

Date: Thu, 6 May 93 04:30:13 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #546
To: Info-Hams

Info-Hams Digest Thu, 6 May 93 Volume 93 : Issue 546

Today's Topics:

 Call for opinions: 9913 vs. CQ-FLEXI
 Confusing letters in call signs
 Daily Solar Geophysical Data Broadcast for 05 May
 PVC tubing for mast?
 Standard 12 VDC Connectors
 TDMA radios
 Wanted Manual: KG-650
 Zed in callsign: what is it, where come from? (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 5 May 1993 19:16:12 GMT
From: swrinde!cs.utexas.edu!zaphod.mps.ohio-state.edu!ub!csn!cherokee!da_vinci!
lookout.mtt.it.uswc.uswest.com!dfeldman@network.UCSD.EDU
Subject: Call for opinions: 9913 vs. CQ-FLEXI
To: info-hams@ucsd.edu

In article <1993May5.135506.23027@ryn.mro4.dec.com> taber@cimfie.enet.dec.com
(PStJTT) writes:

>Wrong question. The question you should be asking is: "is 9913 worth
>the extra N-cents per foot for an HF application?" The generally
>accepted answer to that is "no."
>9913 has a number of problems -- it's big, it's inflexible, its air
>dielectroc is subject to moisture problems. The list goes on.

I am preparing to retire about 1000' of 9913 due to moisture intrusion

over the last 5 years. Very disappointed. RG213 has very little extra loss; by the time the 9913 starts dying, the 213 comes out ahead.

73!

Date: Wed, 5 May 1993 19:09:19 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
zaphod.mps.ohio-state.edu!cs.utexas.edu!sdd.hp.com!hpscit.sc.hp.com!
news.dtc.hp.com!srigenprp!alanb@network.UCSD.EDU
Subject: Confusing letters in call signs
To: info-hams@ucsd.edu

Rich Wales WA6SGA/VE3 (richw@mks.com) wrote:

: But I'm aware that certain letters, or groups of letters, can be con-
: fusing over the air when using voice. ...

: F / S

: G / J (especially GA misunderstood as JA)

: I / Y (especially OI/OY, QI/QY, UI/UY, WI/WY)

B / D / P / T

M / N

Z / C (unless you use the radio convention for Z : "zed")

"N" is OK if the first letter, since there are only 4 possibilities
in the US. For the suffix, the best choices are A and L. :=)

AL N1AL

Date: 6 May 93 07:01:26 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 05 May
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 125, 05/05/93
10.7 FLUX=117.9 90-AVG=130 SSN=090 BKI=1032 2222 BAI=006
BGND-XRAY=B4.1 FLU1=8.5E+04 FLU10=1.3E+04 PKI=1132 3221 PAI=007
BOU-DEV=008,004,024,018,019,010,019,012 DEV-AVG=014 NT SWF=00:000
XRAY-MAX= C2.9 @ 1838UT XRAY-MIN= B3.4 @ 0321UT XRAY-AVG= B5.7

NEUTN-MAX= +001% @ 2335UT NEUTN-MIN= -003% @ 0610UT NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 2335UT PCA-MIN= -0.2DB @ 2155UT PCA-AVG= +0.0DB
BOUTF-MAX=55398NT @ 1251UT BOUTF-MIN=55357NT @ 1944UT BOUTF-AVG=55382NT
GOES7-MAX=P:+039NT@ 2027UT GOES7-MIN=N:-046NT@ 1541UT G7-AVG=+008,+014,-045
GOES6-MAX=P:+125NT@ 1521UT GOES6-MIN=N:-090NT@ 0300UT G6-AVG=+095,-014,-048
FLUXFCST=STD:120,120,125;SESC:120,120,125 BAI/PAI-FCST=015,020,020/015,020,035
KFCST=3333 4333 3344 4433 27DAY-AP=019,017 27DAY-KP=2345 3333 3332 1435
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 04 MAY 93 was 70.0.
The Full Kp Indices for 04 MAY 93 are: 2- 1o 2+ 1+ 2- 2+ 1+ 1+

Date: Wed, 5 May 1993 19:34:13 GMT
From: spsgate!mogate!newsgate!usenet@uunet.uu.net
Subject: PVC tubing for mast?
To: info-hams@ucsd.edu

Does anyone have any experience using PVC tubing for antenna support masts? I'm thinking of putting up an inverted-vee and would like to get the apex up 40 feet or higher. I have heard of people using PVC tubing to construct masts but have never heard any details about it. Is schedule 40 rigid enough? What diameter would be required? How well does it hold up?

I've also seen plans in the Handbooks for wood masts constructed from 2x4's or 2x3's. Anyone ever built one of these? I would think that 20+ ft timbers would be expensive and heavy. If it would work, it seems that PVC would be light, cheap and easy to work with. They also might be useful for Field Day.

Any comments or suggestions?

Thanks & 73... Mark AA7TA

Date: 6 May 93 06:40:21 GMT
From: usc!howland.reston.ans.net!gatech!pitt.edu!jjast7@network.UCSD.EDU
Subject: Standard 12 VDC Connectors
To: info-hams@ucsd.edu

Ed Humphries (edh@hpuerca.atl.hp.com) wrote:
: In <C69MGv.7z1@news.Hawaii.Edu> jherman@uhunix.uhcc.Hawaii.Edu (Jeff Herman)
writes:

: >In article <1993Apr29.174557.24342@porthos.cc.bellcore.com>
whs70@dancer.cc.bellcore.com (sohl,william h) writes:
: >>In article <9304291518.AA23622@emx.cc.utexas.edu> miles@emx.cc.utexas.edu
(Miles Abernathy) writes:
: >>>male body and vice-versa. Use male bodies on power sources and female
: >>>bodies on radios, since the pins in un-plugged female bodies could
: >>>accidentally be shorted together. (humor shields, UP!)

: >Shouldn't the rolls of "male" and "female" be switched here? I would think
: >you would want the female connector to be attached to the power source.
: >[Or have I misread the above]

: >NH6IL
stuff deleted...

: [Drawing of two 2-conductor connectors. The "pointy" end is
: the + connector, the flat end is the - connector. The male
: plug with female pins goes to the power source. The female
: plug with male pins goes to the rig.]

: [N5RCK notes on the connector: the above description may not
: make it clear - the "male" plug has the smaller outside
: dimensions and hence is designed to plug "into" the "female"
: connector. The male plug has enclosed female pins (hence is
: very hard to touch or short the pins) and is to be connected
: to the power supply side (source). The female plug has open
: male pins (hence accessible) and is to be connected to the
: equipment side (sink). The plugs have a flat (squared off)
.. stuff deleted

OK, folks, here's the scoop. Yes, it boils down to semantics, but
take it from a former chassis wireman:

<Warning - the following discussion contains sexually explicit
material, sensitive viewers may want to find something else to
watch...>

A connector's gender is identified by the contact that it houses.

A male connector body, or housing, contains pins. Generally those
pins will stick out, although they do not necessarily extend beyond
the shell. An exception is the cord caps used for 120 V.A.C. power,
but these are low cost, and generally sturdier (except for the ground
pin, which is seems to be weaker, since it is always broken off).

A female connector body contains sockets, into which the male pins are
inserted. These are usually recessed into the connector housing.
Since they are better protected (except from two-year-olds with paper

clips), a good design will use them for the power source.

It doesn't matter how the housings mate with each other.

Now, lets do a table:

Male	Female
Plug	Receptacle
Pin	Socket
Plug	Jack

Pen(well, you get the picture). Just ask your self - does it have a pin sticking out, or a hole to stick it in.

So, to summarize, Male plugs have pins, female receptacles have sockets.

All puns are intended, all offense is not.

Peace, JA

--

But Officer, my car doesn't GO that fast! alles@med.pitt.edu

Date: Thu, 06 May 1993 03:38:19 EST

From: usc!zaphod.mps.ohio-state.edu!ub!dsinc!gvls1!alee!nick@network.UCSD.EDU

Subject: TDMA radios

To: info-hams@ucsd.edu

In message <1993May5.211034.14294@ultb.isc.rit.edu>, cep4478@ultb.rit.edu wrote:

>Can anybody point me to any elementary articles on how to implement a
>TDMA point-to-multipoint wide-bandwidth data radio? The basic ideas
>seem simple enough, but I can't quite see how you'd build a practical
>system. Specifically, when I think of timesharing a channel, I think
>in terms of control packets and go-ahead messages, but if you've got
>a timeline sliced up into tiny little chunks, the speed-of-light at,
>say, 1/4-T1 speeds, becomes a significant number of bits for a 20-30 mile
>path. I don't see how you can get away with losing that much time out
>of the timeslice, without having a lot of dead airtime in between when a
>close-in radio transmits and a far-away radio gets its timeslice.
>

InterDigital Corp makes and sells a product called the Ultraphone that uses TDMA to communicate between a base station and up to four subscriber units on a single RF channel pair (separate receive and transmit frequencies).

The Ultraphone uses a 45msec frame. The timeslice for each subscriber is 11.25 msec. With the modulation that is used each subscriber unit has an effective data rate of just under 16kbps. The "just under" is to allow

for guard time between each timeslice. The Ultraphone avoids the need for a large guard time by using dynamic time adjustment in the subscriber units. The base station continually monitors the timing of the data packets that it receives. If the base station detects that a subscriber's data is arriving too early (a close-in subscriber) it will direct that unit to delay its transmit timing. If a subscriber unit is transmitting too late (a far away unit) the base station will direct that unit to advance its transmit timing. The advance and delay are relative to the timing of the timeslice that the subscriber unit receives. A few bits in the base station to subscriber path are reserved for the timing adjustment information. At the start of each call less data is sent, allowing more guard time. The base station can usually properly adjust the subscribers transmit timing within three 45 msec frames.

I believe that a similar method is being used in the new TDMA digital cellular systems that are now being developed. I think InterDigital has a patent on the general scheme.

Nick Schreier uucp: nick@alee.UUCP
 internet: nick%alee@VFL.Paramax.COM

Date: Wed, 5 May 1993 11:39:09 GMT
From: sdd.hp.com!cs.utexas.edu!zaphod.mps.ohio-state.edu!pacific.mps.ohio-state.edu!linac!att!att!fang!tarpit!bilver!vicstoy!kc4zvw@decwrl.dec.com
Subject: Wanted Manual: KG-650
To: info-hams@ucsd.edu

Manual or schematic diagram and parts list wanted for a
Knight R.F. generator model KG-650 that was made by
Allied Radio in Chicago.

73 de KC4ZVW kc4zvw@stardust.oau.org

* Manual Tagline * SET obfuscation MODE of polysyllabic terminology OFF

Date: 6 May 93 05:11:48 GMT
From: usc!howland.reston.ans.net!darwin.sura.net!sgiblab!muninari.oz.au!
sol.deakin.OZ.AU!news.cs.uow.edu.au!mippet.ci.com.au!eram!dave@network.UCSD.EDU
Subject: Zed in callsign:what is it, where come from?
To: info-hams@ucsd.edu

[No doubt gazillions of followups]

In article <easu348.736460736@orion.oac.uci.edu>,
easu348@orion.oac.uci.edu (Andrew Schwartz Parker) writes:

| Here in California (hopefully elsewhere) HAMS with a "Z" in their
| callsign sometimes say the (word?) "zed" instead of just plain "Z".

Hey! How do _you_ pronounce "Z" then?

For the FAQ:
English-speaking people don't always speak the same English.

--

Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.2
dave@esi.COM.AU ...munari!esi.COM.AU!dave available

Date: Wed, 05 May 93 20:22:39 GMT
From: usc!howland.reston.ans.net!torn!nott!cunews!revcan!balsam!
cowan@network.UCSD.EDU
Subject: Zed in callsign:what is it, where come from?
To: info-hams@ucsd.edu

MOSIER@steffi.uncg.EDU (Steve Mosier) writes:

> > I'm a new HAM, and I have one maybe stupid question that the FAQ does not b
> > to cover. Here in California (hopefully elsewhere) HAMS with a "Z" in their
> > callsign sometimes say the (word?) "zed" instead of just plain "Z". I'm
> > wondering why, and where it came from, if anyone knows. Oh, and it's not ju
> > another replacement for "zulu", it's instead of the letter Z. Thanks for
> > everyone's help.
>

> Z is hard to distinguish from B,C,D,E,G,P,T,& V when just spoken without any
> phonetic. But saying "zulu" in place of Z each time is rather lengthy. So m
> hams just use the French for the letter Z, which is zed. A lot of people who
> have spent time in Europe also do an analagous thing when writing Z, by
> putting a horizontal line through the letter to distinguish it from a 2.

I would guess that the 26th letter of the alphabet is pronounced "zed" in
many more places and by more people than pronounce it "zee". It is "zed"
all over Europe, Canada, and (I think) South America, Australia, India, and
African countries where "z" is part of the alphabet.

I've often wondered why Americans pronounced it "zee"? Is there a history to
that that might be worth knowing?

--

Darin Cowan - cowan@balsam.pinetree.org | I just try to make people's
VE3 OIJ | lives a little more surreal

Date: Wed, 5 May 1993 18:12:09 GMT
From: pacbell.com!sgiblab!zaphod.mps.ohio-state.edu!howland.reston.ans.net!
noc.near.net!squam.banyan.com!banyan.com!dts@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993May4.175338.67212@cc.usu.edu>,
<1993May5.135506.23027@ryn.mro4.dec.com>, <1993May5.170027.6385@VFL.Paramax.COM>m
Subject : Re: Call for opinions: 9913 vs. CQ-FLEXI

In article <1993May5.170027.6385@VFL.Paramax.COM>, rossi@VFL.Paramax.COM (Pete Rossi) writes:

|> In article <1993May5.135506.23027@ryn.mro4.dec.com> taber@cimfie.enet.dec.com (PStJTT) writes:

|> >

|> >In article <1993May4.175338.67212@cc.usu.edu>, slp9m@cc.usu.edu writes...>

|> >> So, now the question for the experienced - is the extra 14 cents per

|> >>foot worth the added flexibility (and any other advantage the Certified Quality

|> >>product may hold over Belden)?

|> >>

|> >

|> >Wrong question. The question you should be asking is: "is 9913 worth

|> >the extra N-cents per foot for an HF application?" The generally

|> >accepted answer to that is "no."

|> >

|> >9913 has a number of problems -- it's big, it's inflexible, its air

|> >dielectroc is subject to moisture problems. The list goes on.

|>

|> I used to always use Belden 8214 for HF. But I am sure it has its problems too.

|>

|> I haven't decided yet what to use on my new tower going up this summer. I was

|> thinking of using 9913 for the VHF/UHF antennas and since the cost difference

|> is not all that much compared to 8214, even using it for HF (20-15-10). But

|> after hearing about all the water problems I am not so sure now.

I've been using a lot of 9913 for both VHF and HF work. Basically the stuff is pretty cheap in bulk... I have not had any water problems, but then I use type N connectors which include rubber seals, etc. The type N's are not a perfect solution on their own: you still need to do proper weatherproofing of the connectors.

I would prefer it if 9913 had a non-contaminating jacket. I do have some of the stuff buried and expect to have to replace it eventually.

The best things about 9913 are its relatively low loss and its high velocity factor. 9913 should be very usable as thick ethernet, provided you don't want to tap it... Not too many coax flavors have a .84 or better velocity.

```
|>
|> =====
|> Pete Rossi - WA3NNA                rossi@VFL.Paramax.COM
|>
|> Paramax Systems Corporation - a Unisys Company
|> Valley Forge Engineering Center - Paoli, Pennsylvania
|> =====
```

--

```
-----
Daniel Senie                Internet:    dts@banyan.com
Banyan Systems, Inc.        Compuserve:  74176,1347
508-898-1188                Packet Radio: N1JEB@WA1PHY.MA
```

```
-----
Date: 5 May 1993 18:57:40 GMT
From: sdd.hp.com!cs.utexas.edu!asuvax!chnews!joshua!jbromley@decwrl.dec.com
To: info-hams@ucsd.edu
```

References <C68F4p.ABq@ucdavis.edu>, <1993Apr29.075411.9186@nnnnpd2.cxo.dec.com>,
<1993May5.084839.22423@usl.edu>
Subject : Re: no-code defense

cfm1471@ucs.usl.edu (Morrison Charles F) writes:

>Im wondering, Todd, what exactly is the deal with the "nuts2u::little"?

It's a VMS joke. Consider yourself blessed if you don't understand it.

- Jim, W5GYJ

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Date: Wed, 5 May 1993 23:31:09 GMT
From: telesoft!garym@uunet.uu.net
To: info-hams@ucsd.edu
```

References <1993May3.204252.7316@alsys.com>, <1993May4.223037.21485@alsys.com>,
<1993May5.223031.22283@alsys.com>
Subject : STS-55 Element Set (93125.249)

STS 55

1 22640U 93 27 A 93125.24999999 .00041435 00000-0 11400-3 0 240
2 22640 28.4566 204.4193 0014724 329.9791 340.6464 15.92206044 1379

(for Shuttle Elements subscription info, email: listserv@alsys.com)

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Gary Morris KK6YB Internet: elements-request@alsys.com
San Diego, CA, USA Phone: +1 619-457-2700

End of Info-Hams Digest V93 #546
